IN THE CLAIMS

Claim 1 (**currently amended**). A hotmelt pressure sensitive adhesive comprising at least one polyacrylate component and an added filler comprising **calcium** carbonate, wherein said at least one polyacrylate component

- is formed from monomers comprising least 50% by weight, of at least one acrylic or methacrylic ester, or both, of the formula (I)

$$CH_2 = CH(R_1)(COOR_2) \qquad (I)$$

where R_1 = H or CH_3 and R_2 is an unbranched, branched or cyclic alkyl radical having 1 to 22 carbon atoms and

- is substantially free ~~from polar groups~~ **of carboxyl or hydroxyl groups**.

Claim 2 (**currently amended**). The adhesive as claimed in claim 1, wherein said at least one polyacrylate component has ~~an~~ **a weight** average ~~molar~~ **molecular** weight M_W of not more than 500 000 g/mol.

Claim 3 (previously presented). The adhesive as claimed in claim 1, wherein the added filler comprising calcium carbonate is chalk.

Claim 4 (previously presented). The adhesive as claimed in claim 1, wherein the amount of said added filler comprising calcium carbonate is at least 10% wt., based on the weight of polyacrylate component.

Claim 5 (previously presented). The adhesive as claimed in claim 1, having a shrinkback, after extrusion coating, of not more than 5%.

Claim 6 (**canceled**).

Claim 7 (previously presented). The adhesive as claimed in claim 1, wherein R_2 is selected from the group consisting of unbranched, branched, and cyclic C_4 to C_{14} alkyl radicals.

Claim 8 (previously presented). The adhesive as claimed in claim 7, wherein R_2 is selected from the group consisting of bridged or unbridged, alkylated or unalkylated cycloalkyl radicals having at least 6 carbon atoms.

Claim 9 (previously presented). The adhesive as claimed in claim 7, wherein the at least one acrylic and/or methacrylic ester of formula (I) is selected from the group consisting of methyl acrylate, methyl methacrylate, ethyl acrylate, n-butyl acrylate, n-butyl methacrylate, n-pentyl acrylate, n-hexyl acrylate, n-heptyl acrylate, n-octyl acrylate, n-octyl methacrylate, n-nonyl acrylate, lauryl acrylate, stearyl acrylate, behenyl acrylate, isobutyl acrylate, 2-ethylhexyl acrylate, 2-ethylhexyl methacrylate, isooctyl acrylate, isooctyl methacrylate, cyclohexyl methacrylate, isobornyl acrylate, isobornyl methacrylate, and 3,5-dimethyladamantyl acrylate.

Claim 10 (previously presented). The adhesive as claimed in claim 1, wherein said monomers further comprise at least one comonomer in addition to said at least one acrylic and/or methacrylic ester.

Claim 11 (previously presented). The adhesive as claimed in claim 10, wherein the at least one comonomer is a compound selected from the group consisting of N-alkyl-substituted amides.

Claim 12 (previously presented). The adhesive as claimed in claim 10, wherein the at least one comonomer is a compound selected from the group containing maleic anhydride, itaconic anhydride, glyceridyl methacrylate, phenoxyethyl acrylate, phenoxyethyl methacrylate, 2-butoxyethyl acrylate, 2-butoxyethyl methacrylate, cyanoethyl acrylate, cyanoethyl methacrylate, glyceryl methacrylate, and tetrahydrofurfuryl acrylate.

Claim 13 (previously presented). The adhesive as claimed in claim 10, wherein the at least one comonomer is a compound selected from the group consisting of vinyl esters, vinyl ethers, vinyl halides, vinylidene halides, vinyl compounds having aromatic rings or heterocycles in α-position, especially containing vinyl acetate, vinyl formamide, vinyl pyridine, ethyl vinyl ether, vinyl chloride, vinylidene chloride, and acrylonitrile.

Claim 14 (previously presented). The adhesive as claimed in claim 10, wherein the at least one comonomer is a photoinitiator having a copolymerizable double bond.

Claim 15 (previously presented). The adhesive as claimed in claim 10, wherein at least one vinyl aromatic compound is added to the at least one comonomer.

Claim 16 (previously presented). The adhesive as claimed in claim 1, further comprising at least one resin component selected from the group consisting of pinene resins, indene resins, and rosins, and their derivatives and salts; aliphatic, aromatic and alkylaromatic hydrocarbon resins, hydrogenated hydrocarbon resins; substituted and unsubstituted hydrocarbon resins, natural resins, terpene resins, and terpene-phenolic resins.

Claim 17 (previously presented). The adhesive as claimed in claim 1, further comprising one or more additives selected from the group consisting of

plasticizers, nucleators, expandants, compounding agents, aging inhibitors, crosslinkers and promoters.

Claim 18 (previously presented). A process for preparing the hotmelt pressure sensitive adhesive of claim 1, which comprises

(a) at least partially polymerizing at least one acrylic and/or methacrylic ester of the formula (I)

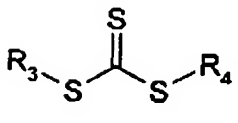
$$CH_2 = CH(R_1)(COOR_2) \qquad (I)$$

where R_1 is H or CH_3 and R_2 is an unbranched, branched or cyclic C_1 to C_{22} alkyl radical, optionally in the presence of at least one comonomer, to prepare a polyacrylate component, and

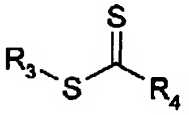
(b) adding a filler comprising calcium carbonate to the polymerization media before or after the polymerization .

Claim 19 (original). The process as claimed in claim 18, wherein the polymerization is conducted in solution or without solvent.

Claim 20 (previously presented). The process as claimed in claim 18 or 19, wherein the polymerization is conducted in the presence of at least one control reagent of the formula (II), (III), (IV) and/or (V)



(II)



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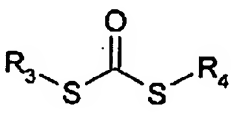
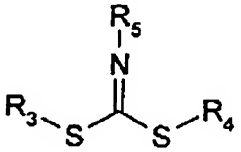


(IV)

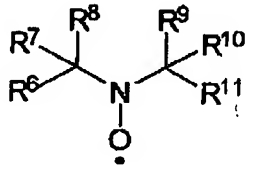


(V)

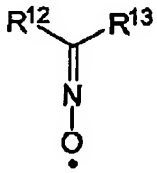
in which R_3, R_4, and R_5 independently of one another or identically are selected from the group consisting of

- branched and unbranched C_1 to C_{18} alkyl radicals; C_3 to C_{18} alkenyl radicals; C_3 to C_{18} alkynyl radicals;
- C_1 to C_{18} alkoxy radicals;
- C_3 to C_{18} alkynyl radicals; C_3 to C_{18} alkenyl radicals; C_1 to C_{18} alkyl radicals substituted by at least one OH group or a halogen atom or a silyl ether;
- C_2-C_{18} heteroalkyl radicals having at least one O atom and/or one NR* group in the carbon chain, R* being an organic radical;
- C_3-C_{18} alkynyl radicals, C_3-C_{18} alkenyl radicals, C_1-C_{18} alkyl radicals substituted by at least one ester group, amine group, carbonate group, cyano group, isocyano group and/or epoxy group and/or by sulfur;
- C_3-C_{12} cycloalkyl radicals;
- C_6-C_{18} aryl or benzyl radicals;
- hydrogen.

Claim 21 (previously presented). The process as claimed in claim 18 or 19, wherein the polymerization is conducted in the presence of at least one control reagent of the general formula (VI) and/or (VII)



(VI)



(VII)

where R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, and R^{13} independently of one another denote:

i) halides,

ii) linear, branched, cyclic, and heterocyclic heterocarbons having 1 to 20 carbon atoms, which are optionally saturated, unsaturated or aromatic,

iii) esters $-COOR^{14}$, alkoxides $-OR^{15}$ and/or phosphonates $-PO(OR^{16})_2$,

where R^{14}, R^{15} or R^{16} stand for radicals from group ii).

Claim 22 (previously presented). A pressure sensitive adhesive tape comprising a backing material which is impregnated by a flame retardant and coated on one or both sides with the adhesive of claim 1.

Claim 23 (previously presented). The pressure-sensitive adhesive tape as claimed in claim 22, wherein the backing material used is a nonwoven, a woven-nonwoven composite or a woven fabric.

Claim 24 (previously presented). The pressure-sensitive adhesive tape as claimed in claim 22 or 23, wherein the backing material is coated with the hotmelt pressure sensitive adhesive from the melt by a hotmelt process.

Claim 25 (previously presented). The pressure-sensitive adhesive tape as claimed in claim 22 or 23, wherein following its application to the backing material the hotmelt pressure sensitive adhesive is crosslinked.

Claim 26 (previously presented). The pressure-sensitive adhesive tape of claim 24, wherein said hotmelt process is roll coating, a melt die process or extrusion coating.

Claim 27 (previously presented). The pressure-sensitive adhesive tape of claim 25, wherein said crosslinking is by UV irradiation, electron beam irradiation, another form of high-energy irradiation, or any combination thereof.

Claim 28 (previously presented). The pressure-sensitive adhesive tape of claim 14, wherein said photoinitiator having a copolymerizable double bond is selected from the group consisting of Norrish I and Norrish II photoinitiators, benzoin acrylates and acrylated benzophenones.

Claim 29 (previously presented). The pressure-sensitive adhesive tape of claim 25, wherein said adhesive is crosslinked by UV radiation and/or electron beams and/or any other high-energy irradiation